## **REMARKS**

Claim 23 is added, and therefore claims 12 to 23 are pending in the present application.

In view of the following, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

With respect to paragraph two (2) of the Office Action, claims 13 to 17 were rejected as indefinite under the second paragraph of 35 U.S.C. § 112.

While the rejections may not be agreed with, to facilitate matters, claim 13 has been rewritten to better clarify the claimed subject matter and now recites the phrase "the on-board electrical system" to refer to the previously recited on-board electrical system in claim 12, as suggested by the Office Action. It is therefore respectfully requested that the rejections be withdrawn.

As to paragraph four (4) of the Office Action, claims 12, 13, 18, 19, 21, and 22 were rejected under 35 U.S.C. § 102(b) as anticipated by Hara et al., U.S. Patent No. 5,713,814 (the Hara reference).

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102(b), the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See Scripps Clinic & Research Foundation v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed subject matter. (See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; and see Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

While the anticipation rejections may not be agreed with, to facilitate matters, claim 12 has been rewritten to provide the feature of "selecting a characteristic map from a plurality of characteristic maps on the basis of a required electrical power by power consumers of an on-board electrical system." Support for this feature may be found in the Substitute Specification, e.g., at page 2, line 16, to page 3, line 2; and page 5, line 30, to page 6, line 10.

The Hara reference does not identically disclose (or even suggest) the feature of selecting a characteristic map from a plurality of characteristic maps based on a required electrical power by power consumers of an on-board electrical system, as provided for in the context of claim 12, as presented. The Office Action asserts that the "battery state of charge [is] understood to be inversely proportional to the power required by the battery to return the battery to a full charge." (Office Action, pp. 2 & 4 to 5). Regardless of the accuracy of this assertion (which is not conceded by the Applicants), it is respectfully submitted that this assertion is inapplicable to the present claims. Specifically, the required electrical power by power consumers of claim 12 cannot be compared to the state of charge of the battery. As further described in the Substitute Specification, the method according to the presently claimed subject matter takes into consideration the required electrical power by power consumers of the on-board electrical system. Specifically, the Substitute Specification describes the electrical power required by power consumers (PVer) of the on-board electrical system as distinct from the power reserve of the battery (PBat). (Substitute Specification, p. 6, lines 4 to 10). Thus, the required electrical power according to claim 12 is not the battery's state of charge, but rather that of power consumers of the on-board electrical system.

Further, the Office Action wrongly asserts that the characteristic maps in the present application are selected based on the battery's state of charge, which is inversely proportional to the power required by the battery to achieve a full charge state. Taking the state of charge into consideration is an additional feature of dependent claim 13, which is distinct from the electrical power required by power consumers of the on-board electrical system, as provided for in the context of claim 12.

By selecting a map based on the <u>required electrical power by power consumers of an</u> <u>on-board electrical system</u>, it is possible to set an operating point of the drive train so that electrical losses of the drive train during conversion of the drive train can be covered without charging or discharging the battery. (Substitute Specification, p. 5, lines 14 to 28). In stark

contrast, the Hara reference instead refers to switching the operation point due to the battery's state of charge. Specifically, the Hara reference indicates that "a plurality of mode switching maps are provided to correspond to the residue of the battery," and also refers to switching modes "in accordance with the residue of the battery, as determined based upon the output of the battery residue detecting means." (Hara et al., col. 2, lines 66 to 67; and col. 4, line 66, to col. 5, line 30).

Further, Figures 14, 15, and 16 of the Hara reference merely refer to three mode switching maps, each corresponding to a particular battery residue: 60% to 85% residue, less than 60% residue, and greater than 85% residue. (Hara et al., col. 11, line 41, to col. 12, line 9).

The method according to the presently claimed subject matter is therefore wholly different than that of the Hara reference, which does not identically disclose (or even suggest) the feature of selecting a characteristic map from a plurality of characteristic maps on the basis of a required electrical power by power consumers of an on-board electrical system, as provided for in the context of claim 12.

To the extent the Office Action may be relying on the inherency doctrine, there must be provided a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." (M.P.E.P. § 2112). It is respectfully submitted that such a basis in fact and/or technical reasoning has not been provided in the Office Action. Further, the Office Action admits that the Hara reference "fails to explicitly teach that a battery state of charge is related to a power requirement." (Office Action, p. 3). Therefore, it is plainly apparent that the system of the Hara reference at best may only refer to switching maps based on the battery residue, and does not identically disclose (or even suggest) the feature of selecting a characteristic map on the basis of a required electrical power by power consumers of an on-board electrical system, as provided for in the context of claim 12, as presented.

Accordingly, it is respectfully submitted that claim 12, as presented, is allowable for at least the reasons provided above. Claims 13, 18, 19, 21, and 22 depend from claim 12, and are therefore allowable for at least the same reasons as claim 12.

Withdrawal of the rejections of these claims is therefore respectfully requested.

As to paragraph four (4) of the Office Action, claims 12, 13, 18, 19, 21, and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Hara reference in view of King, U.S. Patent No. 5,345,154 (the King reference).

In rejecting a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish <u>prima facie</u> obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

As explained above, the Hara reference does not disclose (or even suggest) all of the features of claim 12, as presented. Further, the King reference merely refers to estimating power losses from electric accessories. (King, col. 2, lines 64 to 67; and Figures 1 and 4). These estimated values are obtainable, and as explained in the Substitute Specification, "[i]t is disadvantageous that the power losses of electrical machines . . . are not considered at all or are merely considered as estimated values." (Substitute Specification, p. 2, lines 2 to 5). Thus, the King reference does not disclose the feature of selecting a characteristic map on the basis of a required electrical power by power consumers of an on-board electrical system, as provided for in the context of claim 12, as presented. Since the King reference does not cure the critical deficiencies of the Hara reference, the proposed combination of the Hara reference and the King reference does not disclose (or even suggest) all of the features of claim 12, as presented. Accordingly, claim 12 is allowable, as are its dependent claims 13, 18, 19, 21, and 22.

Withdrawal of the rejections of these claims is therefore respectfully requested.

As to paragraph five (5) of the Office Action, claim 20 was rejected under 35 U.S.C. § 103(a) as unpatentable over the Hara reference, or alternatively, over the Hara reference in view of the King reference.

As explained above, the Hara reference does not disclose (or even suggest) all of the features of claim 12, as presented. As also explained above, the proposed combination of the Hara reference and the King reference also does not disclose (or even suggest) all of the features of claim 12, as presented. Accordingly, claim 12 is allowable, as is its dependent claim 20.

As to paragraph six (6) of the Office Action, claims 14 to 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Hara reference in view of Yoshino et al., European Patent No. EP1142749 (the Yoshino reference), or alternatively, over the proposed combination of the Hara reference and the King reference in view of the Yoshino reference.

As explained above, the Hara reference does not disclose (or even suggest) all of the features of claim 12, as presented. As also explained above, the proposed combination of the Hara reference and the King reference also does not disclose (or even suggest) all of the features of claim 12, as presented. Since the Yoshino reference does not cure -- and is not asserted to cure -- the critical deficiencies of the Hara reference, or alternatively, the critical deficiencies of the proposed combination of the Hara reference and the King reference, the proposed combination of the Hara reference and the Yoshino reference, or alternatively, the proposed combination of the Hara reference, the King reference, and the Yoshino reference does not disclose (or even suggest) all of the features of claim 12, as presented, so that claim 12 is allowable, as are its dependent claims 14 to 17.

Withdrawal of the rejections of these claims is therefore respectfully requested.

New claim 23 does not add any new matter and is supported by the present application, including the specification. Claim 23 depends from claim 12, as presented, and is therefore allowable for the same reasons. In particular, claim 23 explicitly provides that the "operating point is such that electrical losses of the drive train during conversion of the drive train are coverable without charging or discharging a battery". This benefit is provided by the feature of claim 12 in which a characteristic map is selected from a plurality of characteristic maps on the basis of a required electrical power by consumers of an on-board electrical system. This allows the setting of an "operating point" which is such that "electrical losses of the drive train during conversion of the drive train are coverable without charging or discharging a battery". Accordingly, claim 23 is allowable for this further reason.

In sum, it is respectfully submitted that claims 12 to 23 are allowable.

## **CONCLUSION**

In view of the foregoing, it is respectfully submitted that all of the presently pending claims are allowable. It is therefore respectfully requested that the rejections (and any objections) be withdrawn. All issues raised having been addressed, an early and favorable action on the merits is respectfully requested.

Respectfully submitted,

Dated

Gerard A. Messina (Reg. No. 35,952)

KENYON & KENYON LLP

One Broadway

New York, New York 10004

(212) 425-7200

**CUSTOMER NO. 26646** 

1492070